

#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Peter Ramanauskas. RCRA Corrective Action Project Manager United States Environmental Protection Agency, Region 5 77 Jackson Boulevard (LU-9J) Chicago, IL 60604-3507

April 22, 2015 PJ/DW/PSA

Subject:

Quarterly Progress Report for the Locomotive Fueling Station ArcelorMittal Burns Harbor, LLC, IND003913423

Dear Mr. Ramanauskas.

Per our recent conversation, enclosed is the report, "Quarterly Progress Report October through December 2014 Diesel Fuel Free Product Recovery Locomotive and Mobile Equipment Shop" dated February 16, 2015. This document is being submitted in order to receive EPA agreement that no further action is warranted at the Locomotive Diesel Fueling Station areas.

The Corrective Action Completion Report for Diesel Impacted Soil which was previously submitted and this quarterly progress report provide documentation that an appropriate and complete response to the discovery of the historical release was implemented

These reports conclude all of the corrective measures requirements for the Burns Harbor facility. Therefore, it is also requested that Burns Harbor receive your written concurrence that the requirement to maintain financial assurance for corrective action is no longer needed.

If there are any questions, comments or concerns regarding this matter, please contact me at (219) 787-4643 Sincerely,

Teri Kirk

Environmental Engineer

Enclosure

Cc:

D. P. Bley

August 3, 2010 Project No. 2387354-04-03

GEO-ENVIRONMENTAL ENGINEERS
AND SCIENTISTS

Ms. Theresa Kirk Environmental Engineer ArcelorMittal Burns Harbor, LLC 250 West U.S. Highway 12 Burns Harbor, IN 46304-9745

Re: Quarterly Progress Report
May 2010 through July 2010
Diesel Fuel Free Product Recovery
Locomotive and Mobile Equipment Shop

Dear Ms. Kirk:

Weaver Boos Consultants, LLC (Weaver Boos) has completed this progress report as described in Weaver Boos Proposal No. M90405A, dated April 29, 2010, and as authorized by ArcelorMittal Steel USA (ArcelorMittal) Purchase Order No. B155085 (Lines 8 through 14).

#### BACKGROUND INFORMATION AND PURPOSE

A subsurface release of diesel fuel was discovered north of the Locomotive and Mobile Equipment Shop during a routine construction project in late 2007. Substantial remedial efforts were mounted, which included the removal of over 3,000 cubic yards of diesel fuel-impacted soil and the recovery of free product from the open excavation using a vacuum truck. Several inches of free product was found to remain in monitoring wells drilled after restoration of the site. ArcelorMittal subsequently retained Weaver Boos to design and deploy a free product recovery system utilizing vacuum enhanced in-well skimming technology.

The remediation system was completed, deployed, and placed into service on March 18, 2009 as illustrated on **Figure 1**. Detailed descriptions of the design, construction, and field configuration of the remediation system are provided in our first quarterly progress report dated August 4, 2009 and omitted herein for brevity. This report succinctly summarizes the continuing operation of the

Ms. Theresa Kirk August 3, 2010 Page 2

remediation system and results obtained during its fifth quarter of operations extending from May 2010 through July 2010.

#### OPERATIONS AND MAINTENANCE

Operation of the remediation system has been nearly continuous since it was placed into service. Weaver Boos operated, monitored, and maintained the system during weekly site visits consistent with the standard operating procedure (SOP) provided with the first written progress report. Performance was measured by gauging the accumulation tank and by checking the apparent thickness of diesel fuel free product in the recovery wells. Operating parameters requiring adjustment include setting the vacuum level (12 to 16 inches of water) and setting the pump intake levels to match fluctuating groundwater levels in the wells. Maintenance items included checking and replacement of the vapor extraction system's inline filter as needed, checking and replacement of the air compressor intake filter as needed, regular replacement of the air compressor lubricating oil, and clearing the vapor extraction collection lines of condensate each week.

Weekly operations and maintenance report forms completed between May 5, 2010 and July 29, 2010 are provided in **Appendix A**. On June 17, 2010, we found that the product accumulation tank was full and the system had automatically shut down as designed. The product accumulation tank was subsequently emptied by Tierra Environmental and the system was re-started. On June 24, 2010 we found that the air compressor autodrain line had failed and the system shut down again. On June 29, 2010, we replaced the air compressor receiver autodrain tube and re-started the system.

#### RESULTS

The remediation system has thus far recovered approximately 733 gallons of diesel fuel and approximately 199 gallons of ancillary groundwater since remediation began on March 18, 2009. The quantities of diesel fuel and water collected by the remediation system are summarized on **Table 1**. Approximately 108 gallons of the total diesel fuel recovered were collected during the recently completed quarter ending on July 29, 2010. The free product accumulation tank presently contains 151 gallons of fluid, representing approximately 30 percent of its capacity.

Cumulative diesel fuel recovered is charted as shown on Figure 2. The chart of cumulative free product recovered shows an approximately linear trend through October 2009, after which the



Ms. Theresa Kirk August 3, 2010 Page 3

accumulation of product began to taper. Beginning in May 2010, the accumulation of free product began to increase again. The calculated rate of diesel fuel recovery (gallons per day) is charted on **Figure 3**. Through October 2009 the rate of recovery frequently exceeded 3.0 gallons per day. Beginning in November 2009 through May 2010, the rate was typically less than 1.0 gallons per day, suggesting a declining trend. During May through July 2010 the rate of recovery increased noticeably.

The apparent thickness of free product measured in recovery wells RW-1, RW-2, RW-3, and RW-4 is summarized in **Table 2**. The thickness is described as "apparent" because it represents what is present in the well at the time of measurement and does not necessarily represent the thickness of mobile free product in the aquifer. The actual thickness in the aquifer formation is usually less than the apparent thickness measured in a well. Additionally, the applied vacuum tends to increase the thickness of free product in a well, while the regular pumping of the recovery wells reduces its thickness. Time trends of apparent free product thickness are charted for the recovery wells as shown in **Figure 3**.

#### CONCLUSIONS AND RECOMMENDATIONS

The remediation system continues to perform in accordance with its design parameters and has thus far recovered approximately 733 gallons of diesel fuel since remediation began on March 18, 2009. Approximately 108 gallons of the total diesel fuel recovered were collected during the recently completed quarter ending on July 29, 2010. The rate of diesel fuel recovery began to taper in November 2009, suggesting that depletion of the recoverable free product had occurred. However, the rate of recovery increased noticeably in May 2010, suggesting variability in the quantity of recoverable diesel fuel remaining in the subsurface.

Based on these findings, Weaver Boos recommended that ArcelorMittal continue the operation and a purchase order amendment was subsequently issued for additional operations through October 31, 2010.



Ms. Theresa Kirk August 3, 2010 Page 4

Weaver Boos appreciates this opportunity to be of service and looks forward to bringing this project to a satisfactory conclusion. If there are any comments or questions regarding this information please do not hesitate to call us at (574) 271-3447.

Very truly yours,

Weaver Boos Consultants, LLC

Steven M. Stanford, LPG Senior Project Manager

Attachments:

Table 1 - Diesel Fuel Free Product Recovery Summary

Table 2 - Apparent Thickness of Free Product in Wells

Figure 1 - Remediation System Layout, Locomotive & Mobile Equipment Shop

Figure 2 - Cumulative Free Product Recovery

Figure 3 - Rate of Diesel Fuel Recovery

Figure 4 - Apparent Thickness of Free Product in Wells

Appendix A – Weekly Operations and Maintenance Reports



Table 1
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cummulative Total Diesel Fuel Product Removed from the Subsurface (gallons)	Approximate Rate of Recovery (gallons per day)
3/18/2009	0	0	0	———
4/2/2009	9	33	33	2.2
5/7/2009	17	67	67	1.0
5/14/2009	15	107	107	5.8
5/21/2009	21	137	137	4.3
5/28/2009	19	152	152	2.1
6/4/2009	22	169	169	2.4
6/11/2009	25	179	179	1.4
6/18/2009	25	193	193	2.0
6/25/2009	21	211	211	2.6
7/2/2009	23	243	243	4.6
7/9/2009	25	248	248	0.7
7/16/2009	25	267	267	2.7
7/23/2009	26	294	294	3.9
7/30/2009	26	317	317	3.3
8/6/2009	26	336	336	2.7
8/13/2009	12	47	383	6.7
8/20/2009	12	69	405	3.1
8/27/2009	12	72	408	0.4
9/3/2009	12	83	419	1.6
9/10/2009	13	106	442	3.3
9/17/2009	13	125	461	2.7
9/24/2009	13	131	467	0.9
10/2/2009	14	140	476	1.1
10/8/2009	15	146	482	1.0
10/15/2009	15	148	484	0.3
10/22/2009	16	175	511	3.9
10/29/2009	16	195	531	2.9
11/5/2009	31	221	557	3.7
11/12/2009	47	229	565	1.1
11/19/2009	57	226	562	-0.4
11/25/2009	62	231	567	0.8
12/3/2009	62	241	577	1.3
12/11/2009	62	255	591	1.8

Table 1
Diesel Fuel Free Product Recovery Summary
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Water in Recovery Tank (gallons)	Diesel Fuel Product in Recovery Tank (gallons)	Cummulative Total Diesel Fuel Product Removed from the Subsurface (gallons)	Approximate Rate of Recovery (gallons per day)
12/18/2009	63	255	591	0.0
12/24/2009	64	259	595	0.7
12/31/2009	64	262	598	0.4
1/7/2010	62	266	602	0.6
1/15/2010	62	271	607	0.7
1/22/2010	59	274	610	0.4
1/27/2010	62	273	609	-0.2
2/4/2010	63	272	608	-0.2
2/12/2010	63	272	608	0.0
2/18/2010	62	275	611	0.5
2/25/2010	64	276	612	0.1
3/5/2010	66	275	611	-0.1
3/12/2010	67	274	610	-0.1
3/19/2010	67	276	612	0.2
3/26/2010	68	278	614	0.3
4/1/2010	69	278	614	0.0
4/8/2010	70	280	616	0.2
4/16/2010	70	283	619	0.4
4/22/2010	70	287	623	0.5
4/30/2010	70	289	625	0.3
5/7/2010	71	299	635	1.4
5/14/2010	73	300	636	0.2
5/21/2010	73	313	649	1.8
5/28/2010	75	318	654	0.7
6/4/2010	75	326	662	1.1
6/10/2010	75	335	671	1.5
6/17/2010	75	344	680	1.3
6/24/2010	3	5	685	0.7
7/1/2010	3	6	686	0.1
7/8/2010	6	38	718	4.7
7/14/2010	29	44	724	1.0
7/22/2010	42	47	727	0.4
7/29/2010	98	53	733	0.8
	GRAND TOTAL		733	

Note 1: The volume of water and diesel fuel contained in the tanks is based on dipstick measurements to the nearest 0.25 inch. The quantity of water is estimated using water-finding paste applied to the lower portion of the dipstick. Dipstick measurements are converted to gallons using a tank chart.

Note 2: Tank emptied on August 6, 2009 and on June 17, 2010.

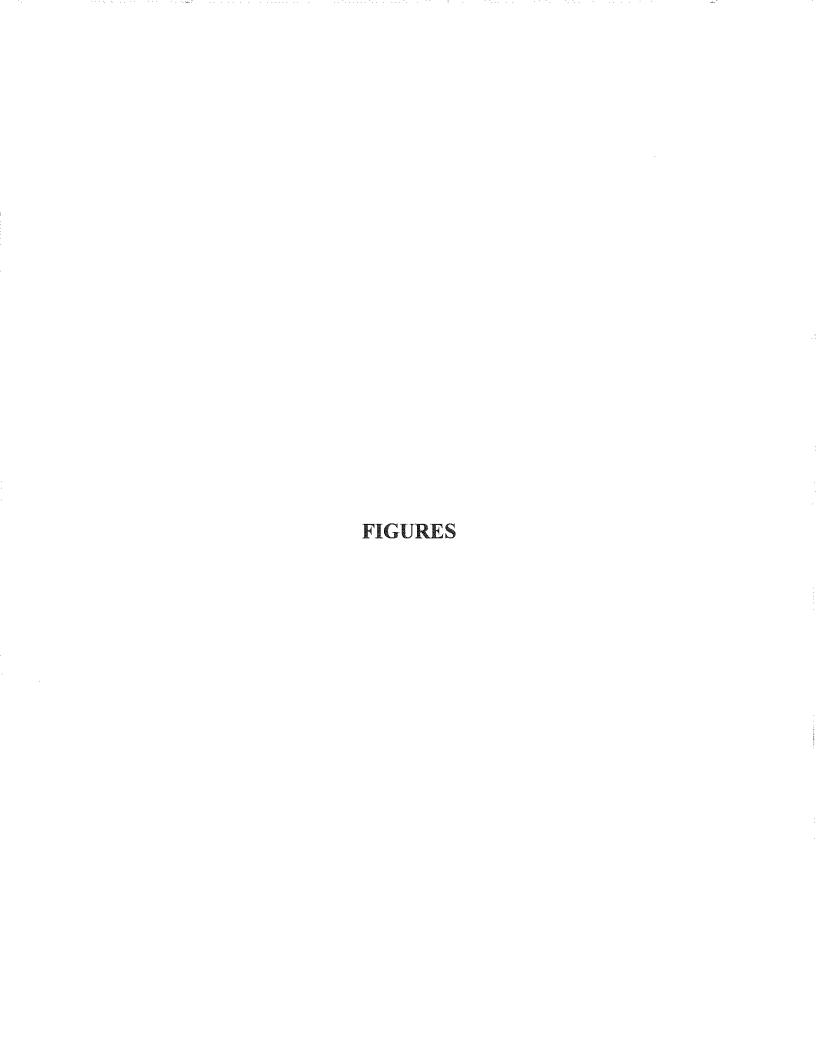
Table 2
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

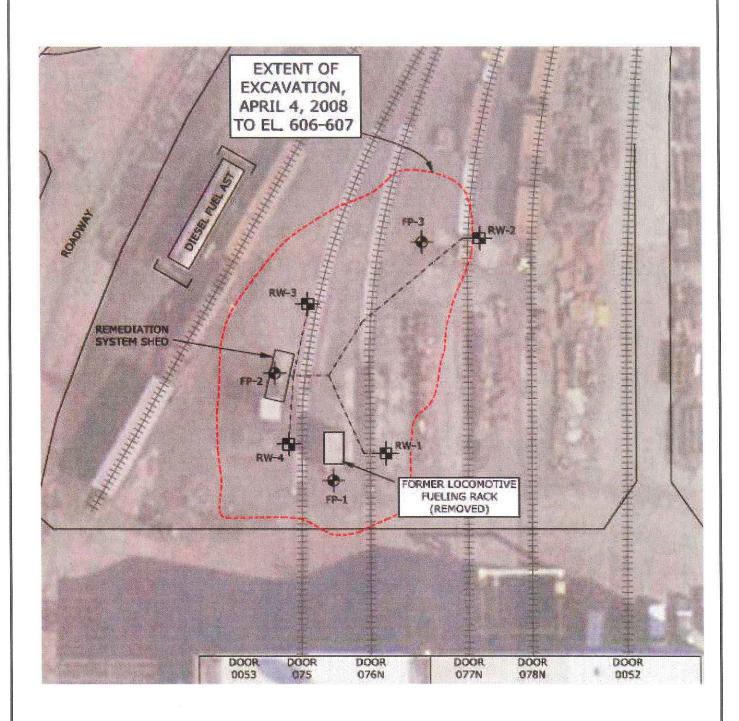
Date	Apparen	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)			
	RW-1	RW-2	RW-3	RW-4	
3/16/2009	0.00	0.25	2.00	1.00	
4/2/2009	0.00	0.19	1.75	0.01	
5/7/2009	0.00	0.50	1.75	0.20	
5/21/2009	0.00	0.50	1.50	0.25	
5/28/2009	0.00	0.13	0.13	0.25	
6/4/2009	0.005	0.13	0.38	0.13	
6/11/2009	Not Measured	0.13	0.25	0.13	
6/18/2009	0.005	0.13	0.38	0.005	
6/25/2009	0.005	0.13	0.38	0.005	
7/2/2009	0.005	0.13	0.25	0.005	
7/9/2009	0.005	0.13	0.25	0.005	
7/16/2009	0.005	0.13	0.25	0.13	
7/23/2009	0.005	0.13	0.25	0.13	
7/30/2009	0.005	0.25	0.375	0.005	
8/6/2009	0.005	0.375	0.375	0.005	
8/13/2009	0.005	0.5	4.5	0.5	
8/20/2009	0.005	0.5	0.75	0.5	
8/27/2009	0.005	0.25	0.375	0.25	
9/3/2009	0.005	0.25	0.375	0.25	
9/10/2009	0.005	0.25	2.75	0.25	
9/17/2009	0.005	0.25	5.0	5.5	
9/24/2009	0.005	0.25	5.0	5.0	
10/2/2009	0.005	0.25	5.0	7.0	
10/8/2009	0.005	0.25	6.0	7.5	
10/15/2009	0.005	0.9	8.0	9.8	
10/22/2009	0.005	0.125	0.8	2.0	
10/29/2009	0.19	0.125	0.005	0.5	
11/5/2009	0.005	0.125	0.25	0.005	
11/12/2009	0.005	0.125	0.25	0.125	
11/19/2009	0.005	0.125	0.25	0.125	
11/25/2009	0.005	0.125	0.375	0.25	
12/3/2009	0.005	0.125	0.5	0.375	
12/11/2009	0.005	0.5	0.5	0.125	
12/18/2009	0.005	0.38	0.5	0.125	
12/24/2009	0.005	0.125	0.5	0.25	

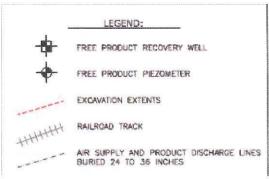
Table 2
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Repair Shop
ArcelorMittal Burns Harbor, LLC
Burns Harbor, Indiana

Date	Apparent Thickness of Free Product Observed in Recovery Wells (Inches)				
	RW-1	RW-2	RW-3	RW-4	
12/31/2009	0.005	0.005	0.25	0.125	
1/7/2010	0.005	<u> </u>		0.188	
1/15/2010	0.005	0.125	0.75	0.25	
1/22/2010	0.005	0.25	1.0	0.375	
1/27/2010	0.005	0.125	0.75	0.375	
2/4/2010	0.005	0.25	1.0	0.375	
2/12/2010	0.50	0.375	0.75	0.375	
2/18/2010	0.005	0.125	0.125	0.005	
2/25/2010	0.005	0.125	0.125	0.005	
3/5/2010	0.125	0.25	0.625	0.125	
3/12/2010	0.005	0.25	0.25	0.005	
3/19/2010	0.005	0.5	2.0	0.005	
3/26/2010	0.005	0.25	1.0	0.005	
4/1/2010	0.005	0.38	1.0	0.005	
4/8/2010	0.125	0.375	0.25	0.005	
4/16/2010	0.005	0.125	0.25	0.005	
4/22/2010	0.005	0.25	1.0	0.0125	
4/30/2010	0.005	0.13	0.25	0.005	
5/7/2010	0.005	0.25	0.625	0.125	
5/14/2010	0.125	0.25	0.375	0.125	
5/21/2010	0.005	0.13	0.25	0.005	
5/28/2010	0.005	0.125	0.75	0.125	
6/4/2010	0.005	0.125	0.50	0.125	
6/10/2010	0.005	0.125	0.25	0.125	
6/17/2010	0.005	0.125	0.25	0.125	
6/24/2010	0.005	0.25	0.25	0.125	
7/1/2010	0.005	0.125	0.50	0.125	
7/8/2010	0.005	0.125	0.25	1.25	
7/14/2010	0.005	0.125	0.50	4.25	
7/22/2010	0.005	0.005	0.25	1.50	
7/29/2010	0.005	0.005	0.75	1.50	

**Notes:** Free product checked by lowering a bottom-filling bailer into the water table surface, retriving it, and measuring with a tape. If only a trace or sheen is present, it is recorded as 0.005 inch.







REMEDIATION SYSTEM LAYOUT LOCOMOTIVE & MOBILE EQUIPMENT SHOP

ARCELORMITTAL BURNS HARBOR, LLC BURNS HARBOR, INDIANA

#### WEAVER BOOS CONSULTANTS

CHICAGO, IL FT. WORTH, SOUTH BEND, IN

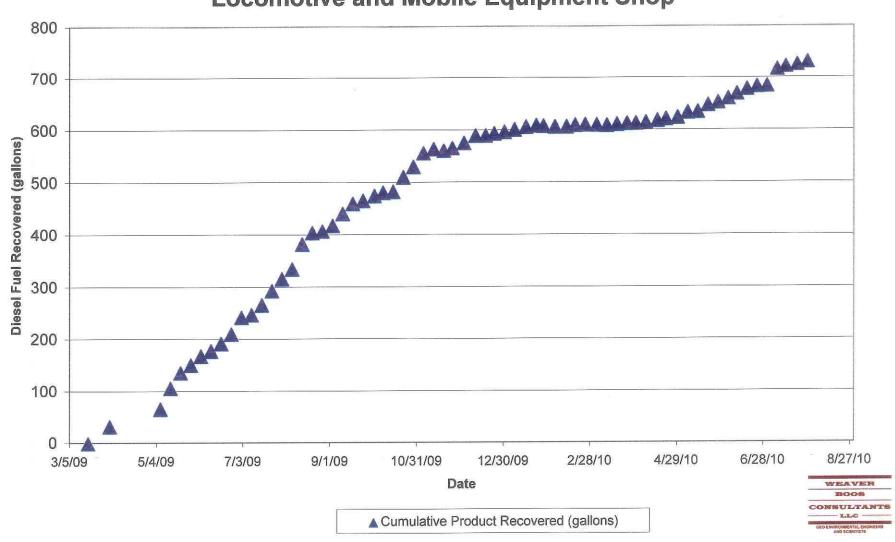
NAPERVILLE, IL SPRINGFIELD, IL FILE: 2387354-04

DRAWN BY: SMS
REVIEWED BY: SMS

DATE: 12/14/09 CAD: SitePL.tcw

FIGURE 1

FIGURE 2
Cumulative Free Product Recovered
Locomotive and Mobile Equipment Shop



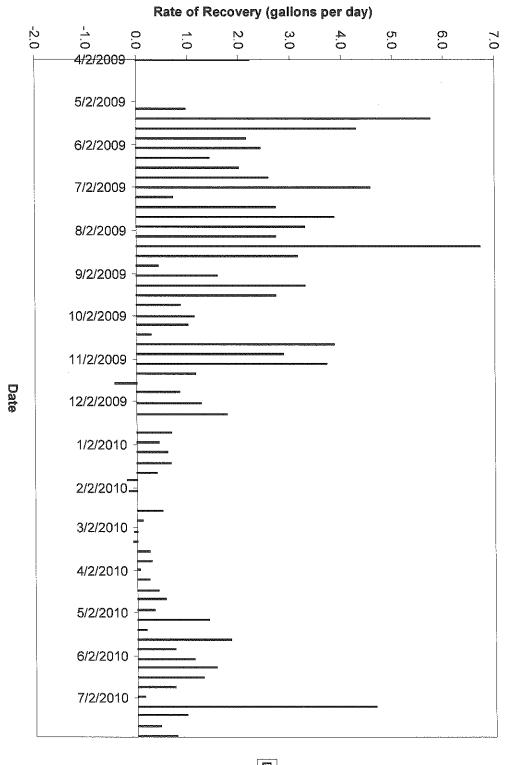


FIGURE 3
Rate of Diesel Fuel Recovery (gallons per day)
Locomotive and Mobile Equipment Shop

EDOS

CONSULTANTS

CONSULTANTS

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CONSULTANTS

■ Rate of Recovery

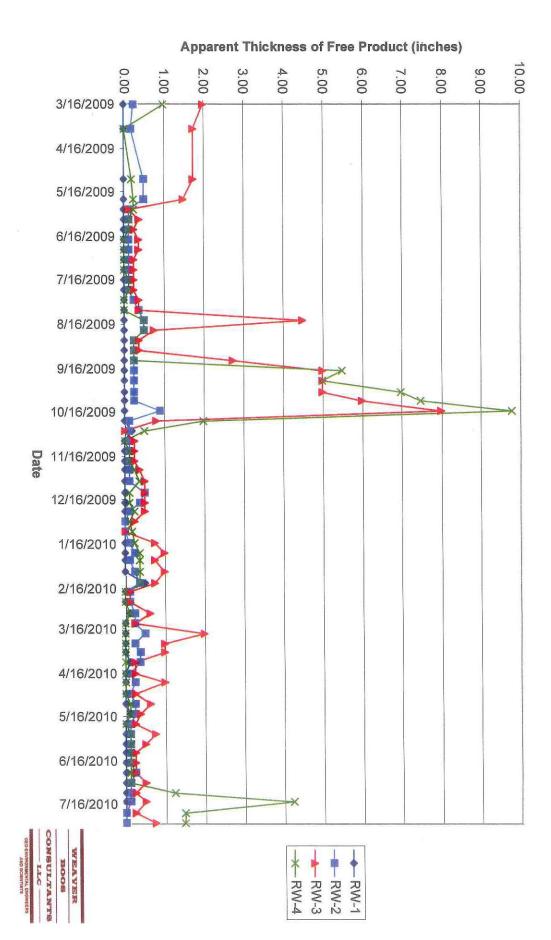


FIGURE 4
Apparent Thickness of Free Product in Wells
Locomotive and Mobile Equipment Shop

## APPENDIX A

Weekly Operating Records

#### WELL WIEDER CONSULTANTS - LLC -

#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

Locomotive Shop Diesel Fuel Remediation System

Date: 5/7/2010 Time: 1:00  Weather Conditions: Rain, 54° F	Observations by: Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	
Panel Warning Lights Illuminated? (Y/N): N :Full Tank Blower Operating Normally? (Y/N): Y	N :Low Vac. N :Low Press. N :Fire Suppression
Blower Vacuum on Arrival (in H <sub>2</sub> O): 12	Blower Vacuum on Departure (in H <sub>2</sub> O):12
Blower Filter OK? (Y/N): Y	If no, was it replaced?
Air Compressor Operating Normally? (Y/N): Y	Observed cycle pressures (psi): 140 :Low 180 :High
Compressor Auto Drain OK? (Y/N): Y	
Pump Pressure (psi): 80	DE COPICA TO S S SOCIES DES MANAGES ANNESS
Shed Exhaust Fan Working Normally? (Y/N): Y	Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y	Set Point for Operation (°F):50
	vacuum lines. RW-4 dead-headed pump again during draining,
some blockage rema	ains in the air line.
OIL RECOVERY MEASUREMENTS	
0 NO W MINE DOM	Read from Tank Chart
Total Fluid Level in Tank (in): 32.25	Total Fluid Volume in Tank (gal): 369.38
Water Level in Tank (in): 9.375	Water Volume in tank (gal): 70.51  ume in Tank (total fluid volume less water volume (gal): 298.87
Oil Vol	ume in Tank (total fluid volume less water volume (gal):298.87
Pumping time (Read from Controller): RW-1 83 :hr	2 :min
KW-2	1
FREE PRODUCT MEASUREMENTS	
FREE FRODOCT MEASOREMENTS	
Free Product in RW-1 (in): Sheen	Free Product in RW-3 (in): 0.625
Free Product in RW-2 (in): 0.25	Free Product in RW-4 (in): 0.125
, 155 ( 15665),	N. Y.
Remarks: Drained knockout tank.	

Contact: S. Stanford, Weaver Boos Consultants, LLC 4085 Meghan Beeler Court

South Bend, IN 46628

(574) 271-3447 Tel. (574) 271-3343 Fax.

sstanford@weaverboos.com

## BOOS CONSULTANTS LLC GEO-ENVIRONMENTAL ENGINEERS

#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

## Locomotive Shop Diesel Fuel Remediation System

Date: 5/14/2010 Time: Weather Conditions: Partly clou	12:30 dy, 63° F	Observations by:	Ted Greer Weaver Boos Consultants, LLC	
FUNCTIONAL PARAMETERS				
Panel Warning Lights Illuminated? (Y/N): Blower Operating Normally? (Y/N): Blower Vacuum on Arrival (in H <sub>2</sub> O): Blower Filter OK? (Y/N):	Y 14, surging Y		:Low Press. N :Fire Suppression  Departure (in H <sub>2</sub> O): 12	
Air Compressor Operating Normally? (Y/N):  Compressor Auto Drain OK? (Y/N):  Pump Pressure (psi):  Charles Tyles (Y/N):	Y 80		Observed cycle pressures (psi):	140 :Low 180 :High
Shed Exhaust Fan Working Normally? (Y/N): Shed Heater Operating Normally? (Y/N): Water in Vacuum Lines?	Y		Set Point for Operation (°F):_ Set Point for Operation (°F):_ d-headed pump again during drainin	50
OIL RECOVERY MEASUREMENTS				
Total Fluid Level in Tank (in): 32.5  Water Level in Tank (in): 9.5  Pumping time (Read from Controller): RW-1		ne in Tank (total fluid s	Total Fluid Volume in Tank (gal): _ Water Volume in tank (gal): _ volume less water volume (gal): _	ead from Tank Chart 372.59 72.53 300.06
RW-2		25 :min	RW-4 84 :hr	39 :min
FREE PRODUCT MEASUREMENTS				
Free Product in RW-1 (in):	0.125 0.25		t in RW-3 (in): 0.375 t in RW-4 (in): 0.125	
Remarks: Drained knockout tank.		70		=

#### WEAVER **B008** CONSULTANTS - LLC -GEO-ENVIRONMENTAL ENG AND SCIENTISTS

#### Weekly Operations and Maintenance Report Mittal Steel USA **Burns Harbor**

Locomotive Shop Diesel Fuel Remediation System

Date: 5/21/2010 Time: 13:30  Weather Conditions: Partly cloudy, rain, 63° F	Observations by:	Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS		
Panel Warning Lights Illuminated? (Y/N):  Blower Operating Normally? (Y/N):  Blower Vacuum on Arrival (in H <sub>2</sub> O): 14, surging  Blower Filter OK? (Y/N):  Air Compressor Operating Normally? (Y/N):  Compressor Auto Drain OK? (Y/N):		:Low Press. N :Fire Suppression  Departure (in H <sub>2</sub> O): 12  Observed cycle pressures (psi): 140 :Low 180 :High
Pump Pressure (psi): 80  Shed Exhaust Fan Working Normally? (Y/N): Y  Shed Heater Operating Normally? (Y/N): Y  Water in Vacuum Lines? Water drained from the second secon	rom vacuum lines. RW-4 dead	Set Point for Operation (°F): 90 Set Point for Operation (°F): 50 I-headed pump again during draining,
OIL RECOVERY MEASUREMENTS		
Total Fluid Level in Tank (in): 33.5  Water Level in Tank (in): 9.5  Oil  Pumping time (Read from Controller): RW-1 85 :hr	Volume in Tank (total fluid v	Read from Tank Chart  Total Fluid Volume in Tank (gal): 385.31  Water Volume in tank (gal): 72.53  volume less water volume (gal): 312.78  RW-3 85 :hr 50 :min
RW-2 85 :hr	49 :min	<b>RW-4</b> 86 :hr 4 :min
FREE PRODUCT MEASUREMENTS		
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.13		in RW-3 (in): 0.250 in RW-4 (in): Sheen
Remarks: <u>Drained knockout tank.</u> Changed compressor p	oump fluid.	

# BOOS CONSULTANTS LLC GEO-ENVIRONMENTAL ENGINEERS AND SCIENTISTS

#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

#### Locomotive Shop Diesel Fuel Remediation System

Date:         5/28/2010         Time:         13:00           Weather Conditions:         Clear, 67° F	Observations by:	Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS		
Panel Warning Lights Illuminated? (Y/N): N :Full Tan Blower Operating Normally? (Y/N): Y Blower Vacuum on Arrival (in H <sub>2</sub> O): 12 Blower Filter OK? (Y/N): Y Air Compressor Operating Normally? (Y/N): Y Compressor Auto Drain OK? (Y/N): Y Pump Pressure (psi): 80		:Low Press. N :Fire Suppression  Departure (in H <sub>2</sub> O): 12  Observed cycle pressures (psi): 140 :Low 180 :High  Set Point for Operation (°F): 90
Shed Exhaust Fan Working Normally? (Y/N): Y		Set Point for Operation (°F): 50
Shed Heater Operating Normally? (Y/N): Y Water in Vacuum Lines? Water draine	d from vacuum lines PW A dead	Oct i onk for operation ( i ).
	ge remains in the air line.	-neaded pump again during draining,
OIL RECOVERY MEASUREMENTS	ge remains in the air line.	
Total Fluid Level in Tank (in): 34.125  Water Level in Tank (in): 9.75	Marker of Section 1	Read from Tank Chart Total Fluid Volume in Tank (gal): 393.13 Water Volume in tank (gal): 75.24 volume less water volume (gal): 317.89
Pumping time (Read from Controller): RW-1 87 :hr RW-2 :hr	14 :min 13 :min	RW-3     87     :hr     14     :min       RW-4     87     :hr     28     :min
FREE PRODUCT MEASUREMENTS		
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125		t in RW-3 (in): 0.75 t in RW-4 (in): 0.125
Remarks: Drained knockout tank.		

Contact: S. Stanford, Weaver Boos Consultants, LLC

4085 Meghan Beeler Court South Bend, IN 46628 (574) 271-3447 Tel. (574) 271-3343 Fax.

sstanford@weaverboos.com

#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

Locomotive Shop Diesel Fuel Remediation System

Date: 6/4/2010 Time: 13 Weather Conditions: Clear, 77° F	3:00 Observations by:	Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS		
Panel Warning Lights Illuminated? (Y/N): N :Fi		:Low Press. N :Fire Suppression
Blower Vacuum on Arrival (in H <sub>2</sub> O): 12		eparture (in H <sub>2</sub> O): 12
Blower Filter OK? (Y/N): Y	If no, was it replaced?	
Air Compressor Operating Normally? (Y/N): Y  Compressor Auto Drain OK? (Y/N): Y  Pump Pressure (psi):	80	Observed cycle pressures (psi): 140 :Low 180 :High
Shed Exhaust Fan Working Normally? (Y/N): Y	<del></del>	Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y		Set Point for Operation (°F): 50
	drained from vacuum lines. RW-4 dead-	-headed pump again during draining,
	lockage remains in the air line.	
OIL RECOVERY MEASUREMENTS		
Total Fluid Level in Tank (in): 34.750  Water Level in Tank (in): 9.75	Oil Volume in Tank (total fluid v	Read from Tank Chart Total Fluid Volume in Tank (gal): 400.82 Water Volume in tank (gal): 75.24  volume less water volume (gal): 325.58
Pumping time (Read from Controller): RW-1 88 :hi	nr <u>38</u> :min	RW-3     88     :hr     38     :min       RW-4     88     :hr     52     :min
FREE PRODUCT MEASUREMENTS		
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125		in RW-3 (in): 0.50 in RW-4 (in): 0.125
Remarks: Drained knockout tank.	а о	-

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

Locomotive Shop Diesel Fuel Remediation System

Date: 6/10/2010 Time: 13:30 Weather Conditions: Clear, 69° F	Observations by:	Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS		以表现了1946年19月4日2日2日,自由1948年19月2
Panel Warning Lights Illuminated? (Y/N): N :Full T Blower Operating Normally? (Y/N): Y Blower Vacuum on Arrival (in H <sub>2</sub> O): 14, surging Blower Filter OK? (Y/N): Y		
Air Compressor Operating Normally? (Y/N): Y Compressor Auto Drain OK? (Y/N): Y Pump Pressure (psi): 80 Shed Exhaust Fan Working Normally? (Y/N): Y		Observed cycle pressures (psi): 140 :Low 180 :High  Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y  Water in Vacuum Lines? Water drain	ed from vacuum lines. RW-4 dead	Set Point for Operation (°F): 50
some blocks	age remains in the air line.	
OIL RECOVERY MEASUREMENTS		
Total Fluid Level in Tank (in): 35.500  Water Level in Tank (in): 9.75	Oil Volume in Tank (total fluid v	Total Fluid Volume in Tank (gal): 409.96 Water Volume in tank (gal): 75.24  volume less water volume (gal): 334.72
Pumping time (Read from Controller): RW-1 89 :hr RW-2 89 :hr	50 :min 49 :min	RW-3     89     :hr     50     :min       RW-4     90     :hr     4     :min
FREE PRODUCT MEASUREMENTS		
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125		in RW-3 (in): 0.25 in RW-4 (in): 0.125
Remarks: Drained knockout tank. Estimate that Holdin	ng Tank will need to be emptied by	end of June.

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

Locomotive Shop Diesel Fuel Remediation System

Date:         6/17/2010         Time:         13:30           Weather Conditions:         Clear, 78° F	Observations by: Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	
Panel Warning Lights Illuminated? (Y/N): Y :Full Tan Blower Operating Normally? (Y/N): Y Blower Vacuum on Arrival (in H <sub>2</sub> O): 0 Blower Filter OK? (Y/N): Y Air Compressor Operating Normally? (Y/N): Y	k Y :Low Vac. Y :Low Press. N :Fire Suppression  Blower Vacuum on Departure (in H <sub>2</sub> O): 12, steady  If no, was it replaced?  Observed cycle pressures (psi): 140 :Low 180 :High
Compressor Auto Drain OK? (Y/N): Y Pump Pressure (psi): 80 Shed Exhaust Fan Working Normally? (Y/N): Y Shed Heater Operating Normally? (Y/N): Y Water in Vacuum Lines? Water drained	Set Point for Operation (°F): 90 Set Point for Operation (°F): 50 from vacuum lines. RW-4 dead-headed pump again during draining, e remains in the air line.
OIL RECOVERY MEASUREMENTS	
Total Fluid Level in Tank (in): 36.25  Water Level in Tank (in): 9.75  Oil  Pumping time (Read from Controller): RW-1 91 :hr RW-2 91 :hr	Read from Tank Chart   Total Fluid Volume in Tank (gal):   418.90     418.9
FREE PRODUCT MEASUREMENTS	
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125	Free Product in RW-3 (in): 0.25 Free Product in RW-4 (in): 0.125
Remarks: System had shut down due to high-level switc recommend emptying tank at 390 gallons to posystem was successfully restarted.	h being set off. Holding tank level at shutdown was 418.9 gallons. In future, revent automatic shut down of system. Holding tank emptied and

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

## Locomotive Shop Diesel Fuel Remediation System

Date: 6/24/2010 Time: 12:30 Weather Conditions: Clear, 73° F	Observations by: Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	
Panel Warning Lights Illuminated? (Y/N): N :Full Blower Operating Normally? (Y/N): Blower Vacuum on Arrival (in H <sub>2</sub> O): 0 Blower Filter OK? (Y/N): Air Compressor Operating Normally? (Y/N):	Tank Y:Low Vac. Y:Low Press. N:Fire Suppression  Blower Vacuum on Departure (in H <sub>2</sub> O): 0, See Notes  If no, was it replaced?  Observed cycle pressures (psi): :Low :High
Compressor Auto Drain OK? (Y/N):  Pump Pressure (psi):  Shed Exhaust Fan Working Normally? (Y/N):  Shed Heater Operating Normally? (Y/N):  Water in Vacuum Lines? System do	Set Point for Operation (°F): 90 Set Point for Operation (°F): 50
OIL RECOVERY MEASUREMENTS	是是自己的主义,是自己的主义,但是自己的主义,但是他们的主义,但是他们的主义。 1987年(1987年),1987年(1987年),1987年(1987年),1987年(1987年),1987年(1987年),1987年(1987年),1987年(1987年),1987年(1987年),1987年
Total Fluid Level in Tank (in): 2.00  Water Level in Tank (in): 1.00  Pumping time (Read from Controller): RW-1 92 :hr	Read from Tank Chart  Total Fluid Volume in Tank (gal):  Water Volume in tank (gal):  2.64  Oil Volume in Tank (total fluid volume less water volume (gal):  38 :min  RW-3 92 :hr 38 :min
Pumping time (Read from Controller): RW-1 92 :hr RW-2 92 :hr	38 :min     RW-3     92 :hr     38 :min       37 :min     RW-4     92 :hr     52 :min
FREE PRODUCT MEASUREMENTS	
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.25	Free Product in RW-3 (in): 0.25 Free Product in RW-4 (in): 0.125
Remarks: System had shut down due a leak in a pre to restart the system. Informed S. Stanford	essure line on the compressor which was discovered upon attempts d and he will expedite repairs.

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

#### Locomotive Shop Diesel Fuel Remediation System

Date: 7/1/2010 Time: 13 Weather Conditions: Clear, 75° F	3:00 Observations by:	Ted Greer Weaver Boos Consultants, LLC	
FUNCTIONAL PARAMETERS			
Panel Warning Lights Illuminated? (Y/N): N :Find the Blower Operating Normally? (Y/N): Y :Find the Blower Vacuum on Arrival (in H2O): 12 : Blower Filter OK? (Y/N): N : Air Compressor Operating Normally? (Y/N): Y : Compressor Auto Drain OK? (Y/N): Y :Find the Blower Filter OK? (Y/N): Y :Find the Blower Operating Normally? (Y/N): N :F	Blower Vacuum on If no, was it replaced?	:Low Press. N :Fire Suppression  Departure (in H <sub>2</sub> O): 12  Properties Due to be replaced next visit  Observed cycle pressures (psi): 145 :Low 175 :High	
Pump Pressure (psi):  Shed Exhaust Fan Working Normally? (Y/N):  Shed Heater Operating Normally? (Y/N):  Water in Vacuum Lines?  Purge w	vater from air lines.	Set Point for Operation (°F): 90 Set Point for Operation (°F): 50	
OIL RECOVERY MEASUREMENTS			
Total Fluid Level in Tank (in): 2.25  Water Level in Tank (in): 1.13		Read from Tank Chart  Total Fluid Volume in Tank (gal):  Water Volume in tank (gal):  volume less water volume (gal):  5.64  RW-3 94 :hr 2 :min	
Pumping time (Read from Controller): RW-1 94 :h RW-2 94 :h		RW-3 94 :hr 2 :min RW-4 94 :hr 16 :min	
KW-Z _54II			
FREE PRODUCT MEASUREMENTS			
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125		t in RW-3 (in): 0.50 t in RW-4 (in): 0.125	
Remarks: Autodrain line on compressor was repaired and the system is running nominally.			

## EOOS CONSULTANTS GEOGRAFICATION ENGINEERS

#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

#### Locomotive Shop Diesel Fuel Remediation System

Date: 7/8/2010 Time: 13:00  Weather Conditions: Partly cloudy, 80° F	Observations by: Ted Greer  Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	生物(1915年)。
Panel Warning Lights Illuminated? (Y/N): N :Full Tank Blower Operating Normally? (Y/N): Y Blower Vacuum on Arrival (in H <sub>2</sub> O): 12 Blower Filter OK? (Y/N): N Air Compressor Operating Normally? (Y/N): Y Compressor Auto Drain OK? (Y/N): Y	
Pump Pressure (psi): 80  Shed Exhaust Fan Working Normally? (Y/N): Y  Shed Heater Operating Normally? (Y/N): Y  Water in Vacuum Lines? Purge water from	Set Point for Operation (°F): 90 Set Point for Operation (°F): 50 n air lines.
OIL RECOVERY MEASUREMENTS	
Total Fluid Level in Tank (in): 6.75  Water Level in Tank (in): 1.75  Oil V	Total Fluid Volume in Tank (gal): 44.29  Water Volume in tank (gal): 6.07  Volume in Tank (total fluid volume less water volume (gal): 38.22
Pumping time (Read from Controller): RW-1 95 :hr RW-2 1:hr	25 :min     RW-3     95 :hr     26 :min       25 :min     RW-4     95 :hr     34 :min
FREE PRODUCT MEASUREMENTS	
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): 0.125	Free Product in RW-3 (in): 0.25  Free Product in RW-4 (in): 1.25
Remarks:	

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

## Locomotive Shop Diesel Fuel Remediation System

Date: 7/14/2010 Time: Weather Conditions: Partly cloudy, 80	13:00 Observations by:	Ted Greer Weaver Boos Consultants, LLC	
FUNCTIONAL PARAMETERS			
Panel Warning Lights Illuminated? (Y/N): N Blower Operating Normally? (Y/N): Y		:Low Press. N :Fire Suppression	
Blower Vacuum on Arrival (in H <sub>2</sub> O): 12		Departure (in H <sub>2</sub> O): 12	
Blower Filter OK? (Y/N): N	If no, was it replaced?	Due to be replaced next visit	
Air Compressor Operating Normally? (Y/N): Y		Observed cycle pressures (psi): 145 :Low 175 :High	
Compressor Auto Drain OK? (Y/N): Y			
Pump Pressure (psi):	80	Set Point for Operation (°F): 90	
Shed Exhaust Fan Working Normally? (Y/N): Y		Set Point for Operation (°F): 50	
Shed Heater Operating Normally? (Y/N):Y	water from air lines	Set Folilt for Operation (1).	
vvater in vacuum Lines? Purge	water from all lines.		
OIL RECOVERY MEASUREMENTS			
OIL ILEGOVERY HIS TOOLS IN THE		Read from Tank Chart	
Total Fluid Level in Tank (in): 9.50		Total Fluid Volume in Tank (gal): 72.53	
Water Level in Tank (in): 5.00		Water Volume in tank (gal): 28.58	
2000 100 100 100 100 100 100 100 100 100	Oil Volume in Tank (total fluid v	volume less water volume (gal): 43.95	
Pumping time (Read from Controller): RW-1 96 RW-2 96	No. of the control of	RW-3     96     :hr     39     :min       RW-4     96     :hr     52     :min	
FREE PRODUCT MEASUREMENTS			
Free Product in RW-1 (in): Shee Free Product in RW-2 (in): 0.12		in RW-3 (in): 0.50 in RW-4 (in): 4.25	
Remarks: Kink noticed in the blue nylon tube in the well head at RW-4. Consider replacement of the line.			

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#### Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

#### Locomotive Shop Diesel Fuel Remediation System

Date: 7/22/2010 Time: 13:00  Weather Conditions: Overcast, 82° F	Observations by: Ted Greer  Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	
Panel Warning Lights Illuminated? (Y/N): N :Full Tank Blower Operating Normally? (Y/N): Y Blower Vacuum on Arrival (in H <sub>2</sub> O): 12 Blower Filter OK? (Y/N): N Air Compressor Operating Normally? (Y/N): Y Compressor Auto Drain OK? (Y/N): Y Pump Pressure (psi): 80 Shed Exhaust Fan Working Normally? (Y/N): Y	Blower Vacuum on Departure (in H <sub>2</sub> O): 12  If no, was it replaced? Due to be replaced next visit  Observed cycle pressures (psi): 145 :Low 175 :High  Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y	Set Point for Operation (°F):50
Water in Vacuum Lines? Purged water f	from air lines.
OIL RECOVERY MEASUREMENTS	
Total Fluid Level in Tank (in): 11.00 Water Level in Tank (in): 6.50  Oi  Pumping time (Read from Controller): RW-1 98 :hr RW-2 98 :hr	Read from Tank Chart
RVV-2 <u>90</u> .111	14 .IIIII 20 .IIII
FREE PRODUCT MEASUREMENTS	
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): Sheen	Free Product in RW-3 (in): 0.25 Free Product in RW-4 (in): 1.50
	。 第一章
Remarks:	

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# EOOS CONSULTANTS LLC GEO-ENVIRONMENTAL ENGINEERS AND SCIENTISTS

## Weekly Operations and Maintenance Report Mittal Steel USA Burns Harbor

Locomotive Shop Diesel Fuel Remediation System

Date: 7/29/2010 Time: 12:30  Weather Conditions: Clear, 80° F	Observations by: Ted Greer Weaver Boos Consultants, LLC
FUNCTIONAL PARAMETERS	
Panel Warning Lights Illuminated? (Y/N):  Blower Operating Normally? (Y/N):  Blower Vacuum on Arrival (in H <sub>2</sub> O):  Blower Filter OK? (Y/N):  Air Compressor Operating Normally? (Y/N):  Compressor Auto Drain OK? (Y/N):  Pump Pressure (psi):  Shed Exhaust Fan Working Normally? (Y/N):  Y  Fund Tank  16, surging  16, surging  17, Y	N :Low Vac. N :Low Press. N :Fire Suppression  Blower Vacuum on Departure (in H <sub>2</sub> O): 12  If no, was it replaced?  Observed cycle pressures (psi): 140 :Low 180 :High  Set Point for Operation (°F): 90
Shed Heater Operating Normally? (Y/N): Y	Set Point for Operation (°F): 50
Water in Vacuum Lines? Purged water from	7 W W W W W W W W W W W W W W W W W W W
vvater in vaccam Elitor. Target water non	
OIL RECOVERY MEASUREMENTS	
Total Fluid Level in Tank (in): 16.0  Water Level in Tank (in): 11.75  Oil Ve	Read from Tank Chart Total Fluid Volume in Tank (gal):  Water Volume in tank (gal): 98.14  olume in Tank (total fluid volume less water volume (gal): 52.74
Pumping time (Read from Controller): RW-1 99 :hr RW-2 99 :hr	38 :min     RW-3     99 :hr     38 :min       37 :min     RW-4     99 :hr     51 :min
FREE PRODUCT MEASUREMENTS	
Free Product in RW-1 (in): Sheen Free Product in RW-2 (in): Sheen	Free Product in RW-3 (in): 0.75 Free Product in RW-4 (in): 1.50
Remarks: Drained knockout tank	

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#### CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Peter Ramanauskas. RCRA Corrective Action Project Manager United States Environmental Protection Agency, Region 5 77 Jackson Boulevard (LU-9J) Chicago, IL 60604-3507

August 19, 2015 PJ/DW/PSA

Subject:

Progress Report and Termination Request - Locomotive Fueling Station ArcelorMittal Burns Harbor, LLC, (IND003913423)

Dear Mr. Ramanauskas,

In response to your e-mail of May 6, 2015, enclosed is the report, "Progress Report and Termination Request - Corrective Measures for Diesel Fuel Release Locomotive and Mobile Equipment Shop" dated August 7, 2015. This document is being submitted in order to receive EPA agreement that no further action is warranted at the Locomotive Diesel Fueling Station areas.

During the second quarter, groundwater samples were obtained from the remediation wells and a piezometer. The sampling results are compared to the Indiana Department of Environmental Management's RISC industrial default closure levels and RCG screening levels for vapor intrusion at industrial sites (Table 5 of the report). Those results indicate that BTEX and PAH's were well below screening levels. In addition, the skimmer pumps were out of service for the first quarter and part of the second quarter of 2015 for reconditioning. The lack of removal resulted in very little apparent build-up of product. The pumps were reinstalled in April. Despite the outage, only 10 gallons of product were recovered during the second quarter and no product recovery occurred after May 22, 2015.

The Corrective Action Completion Report for Diesel Impacted Soil which was previously submitted and the subject report provide documentation that an appropriate response to the discovery of the historical release of diesel fuel was implemented and completed. These reports conclude all of the corrective measures requirements for the Burns Harbor facility. Therefore, it is also requested that Burns Harbor receive your written concurrence that the requirement to maintain financial assurance for corrective action is no longer needed.

4



If there are any questions, comments or concerns regarding this matter, please contact me at (219) 787-4643

Sincerely,

Teri Kirk

**Environmental Management Department** 

Enclosure

Cc:

D. P. Bley